

Scouting Cam BLACK400phone

Instruction Manual



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1. Caution

- 1) Do not drop, knock or shake the camera.
- 2) The working voltage of the camera is 7.5 to 9.0 V. The camera is supplied by rechargeable lithium battery.
- 3) Remove battery from camera if camera is not be used for some time.
- 4) Only use the supplied power supply, as otherwise danger of fire and electrocution.
- 5) Please unlock the write-protect before inserting the SD-card.
- 6) Please insert the SD-card when the power switch is at OFF position before testing the camera.
- 7) Please do not insert or take out the SD-card when the power switch is at ON position.
- 8) It is recommended to format the SD-card by the camera when used at the first time.
- 9) The camera will be in USB mode when connected to an USB port of a computer. In this case, the SD-card functions as a removable disk.
- 10) Please ensure sufficient power when having firmware upgrade, otherwise the upgrade process could be interrupted incorrectly. If any fault occurs after improper upgrading process, the camera may stop function properly.
- 11) Damage to the electronics, housing and display caused by external influences, such as heavy jerks, electric shocks, having fallen or others aren't covered by the warranty.
- 12) As communication networks may vary reasons we can't guarantee 100% sending and receiving MMS.
- 13) Don't dismantle or repair the camera. If repair is required, ask an expert or technical service centre.
- 14) Keep the camera out of reach of children.

Attention! Legal and privacy protection

- Please inform yourself carefully about the legal regulations in your country concerning to data protection, personal identification, copyright, duty of notification and privacy laws before using this device.
- The Braun Photo Technik GmbH assumes no liability for violations against the Federal Data Protection Act and other legal regulations!
- Privacy of individuals must be preserved. Prepare your camera only at places where this is guaranteed.
- Recordings with people have to be deleted, if there is no agreement for publishing.
- The area of recording has to be displayed clearly to all public entry points.

MMS/SMTP Function!

Please note that the MMS/SMTP function will effect MMS costs. Therefore, please inform yourself about your MMS charges by contacting your mobile phone provider.

2. Instructions

Thank you for purchasing BRAUN Scouting Cam BLACK400phone. This camera is a surveillance camera working automatically. It can be triggered at once by any

movement of human (or animals) in a certain region of interested (ROI) monitored by a high sensitive Passive Infrared (PIR) motion sensor, and then automatically captures high quality pictures (up to 12MP) or records 1080p HD video clips (WVGA or QVGA).

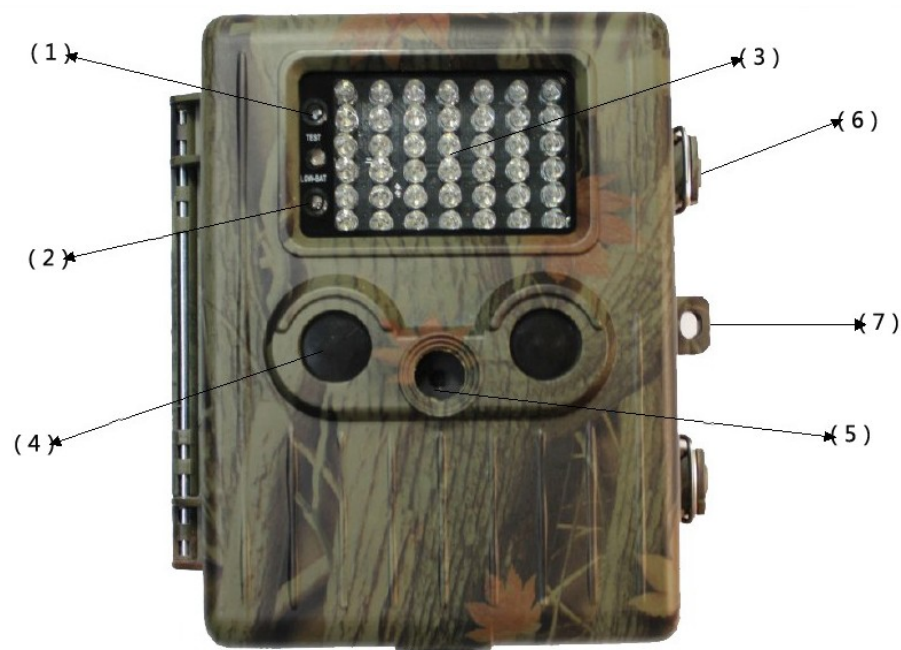
At sunrise the unit begins to take color photos and video until there is insufficient light (dusk) when it begins to take infrared (monochrome) photos and video.

Easy to use, 2.5-inch colour LCD display, supports MMS/email via GSM network.

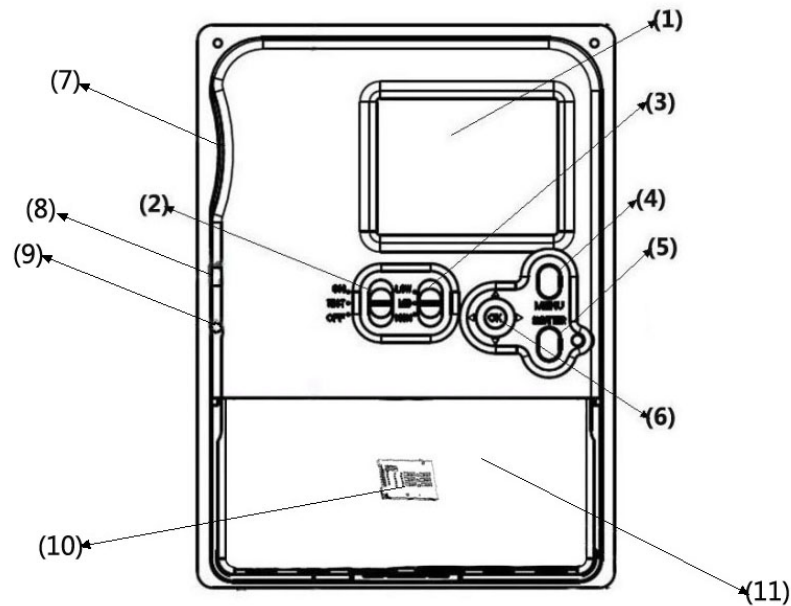
2.1 Camera Body Interface

The camera has the following I/O interfaces: USB connector, SD-card slot, TV output and external DC power connector.

2.2 Camera components and features



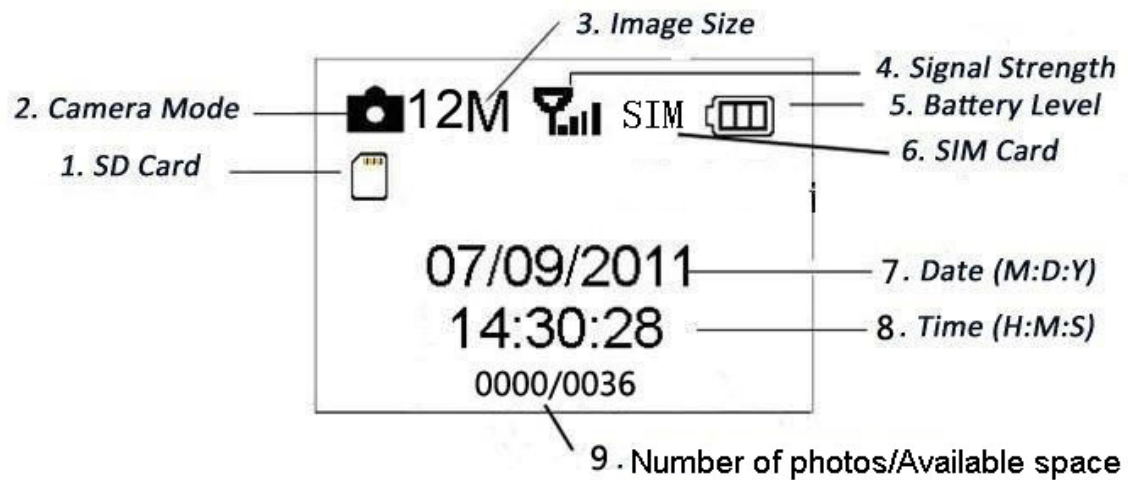
- 1) Test Indicator
- 2) Low Battery Indicator
- 3) Infrared Flash
- 4) PIR
- 5) Lens
- 6) Lock
- 7) Lock hole



- 1) 2.5 inch Color LCD Display
- 2) Power Switch
- 3) Distance Switch
- 4) Menu Switch
- 5) SHUTTER Switch
- 6) Select Switch
- 7) SD-Card Slot
- 8) USB Connector
- 9) TV Out Connector
- 10) SIM-Card Slot
- 11) Battery Compartment




2.3 Shooting Information Display

When the camera is turned on (the power switch is slided to TEST position), the shooting information will be displayed in the monitor.



2.4 MMS Function

This camera can send pictures instantly to your mobile device via the GSM network. You will be alerted only when something has happened; for sending an MMS via the GSM network you need to make the settings in the software first. Review the related information in Chapter 4.1.4 Settings Menu “MMS”.

SIM card icon: There are two SIM card icons.  means that the SIM card is inserted and it works properly.  means that the network signal in your area is very good. Without inserting the SIM card or low signal strength,  will disappear. There are 5 submenu settings for the MMS function, including: APN, MMSC, WAP Gateway, MMS Phone, MMS Mail (refer to Chapter 4.1). MMS Set means that the correct MMS settings according to your network are applied. Send to means input the phone number or email address, to which you want to send. All 5 submenus must have correct settings.

2.5 Supported Format

Item	Format
Photo	JPG
Video	AVI
File Format	FAT32

Here are some important notices. You don't need to concern about the file system format of the camera unless you have problems with reading the SD-card by your other equipment. If this happened, please format the SD-card in the camera or in a computer at first and then reinsert the card into your camera to make a try.

3. Easy Operation

3.1 Power Supply

Open the battery cover. Confirm that the power switch is in OFF position, insert the fully charged lithium battery into the compartment. Replace the battery cover.

When in Test Mode, camera will be automatically shut down to save power if without any operation within 3 minutes; it could be waked up by any movement detection.

When in low-battery state, camera will be also automatically shut down. Please change the batteries in time.

If you have set the MMS function, it will send you a SMS or Email to indicate the low battery situation.

3.2 Insert the SD-card and the SIM-card

Insert SD-card into the card slot with marked side downwards.

Please note that the SD-card can only be plugged in one direction. Make sure that

the write-protect switch of the SD-card is on the “write” position.

When use MMS/e-mail function, be sure to insert SIM-card into the SIM-card slot with angle in the lower left.

3.3 Power on and enter into the ON Mode

Before switching on, please pay attention to the following:

1. Avoid temperature and motion disturbances that could be construed as animals or humans such as trees that are exposed to direct sunlight for much of the day or any other heat source. These may cause false triggers
2. The height from ground for placing the camera should 1 meter with the object. For example for deer waste height is good size appropriately. In general, one to two meters are preferred.

Slide the power switch to the ON position to power on the camera and enter into the ON mode.

After switching on the camera, the motion indication LED (red) will blink for about 15s. The 15s is a buffering time before automatic capturing photos or videos, e.g. for closing and locking the bottom cover, fixing the camera on a tree and walk away.

In ON mode, the camera will take pictures or videos automatically according to the default settings or previous custom settings. The camera has the sound recording function, so the sound will be embedded in the video clip while capturing a video.

3.4 Enter into the TEST Mode

Slide the power switch to the TEST position to enter into the TEST mode. There are some functions in TEST mode: Custom settings, manual capture, preview.

3.4.1 Custom Settings

Press the MENU switch to enter into menu setting. The camera can be taken over control to manually customize the camera settings which display on the camera or external TV monitor. The detailed operations will be described in “Advanced Operations” chapter.

3.4.2 Manual Capturing

You can press SHUTTER to manually capture photos or recording video.

3.4.3 View Images or Videos

There are two ways to view the captured images or videos:

1. LCD screen on camera
2. TV monitors which connects to camera with TV cable

Turn right the select switch to view images, the latest image will be shown in the LCD screen on camera or TV monitor. Press UP to view the previous image and press DOWN for the next. The detailed operations like deleting images or videos will be described in “Advanced Operations” chapter.

3.4.4 Send MMS

The MMS function will be available after MMS is set to “ON” position.

3.5 Power Off

Slide the power switch to OFF position to power off the camera. Please note that even in the OFF mode, the camera still consumes certain power at μA level.

Therefore, please remove the battery if the camera will not be used for a long time.

4. Advanced Operations

The camera has three basic operation modes (Power switch):

- 1) OFF mode: Power switch is at OFF position (Right).
- 2) ON mode: Power switch is at ON position (Left).
- 3) TEST mode: Power switch is at TEST position (Middle).

In the above three modes, the OFF mode is the specified safe mode when replacing the SD-card or batteries and transporting the camera.

This chapter explains the advanced operations for customizing the camera settings.

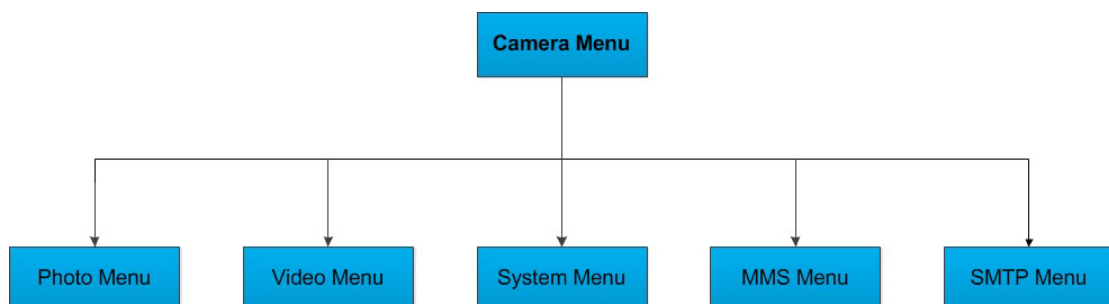
The settings can only be customized in TEST mode.



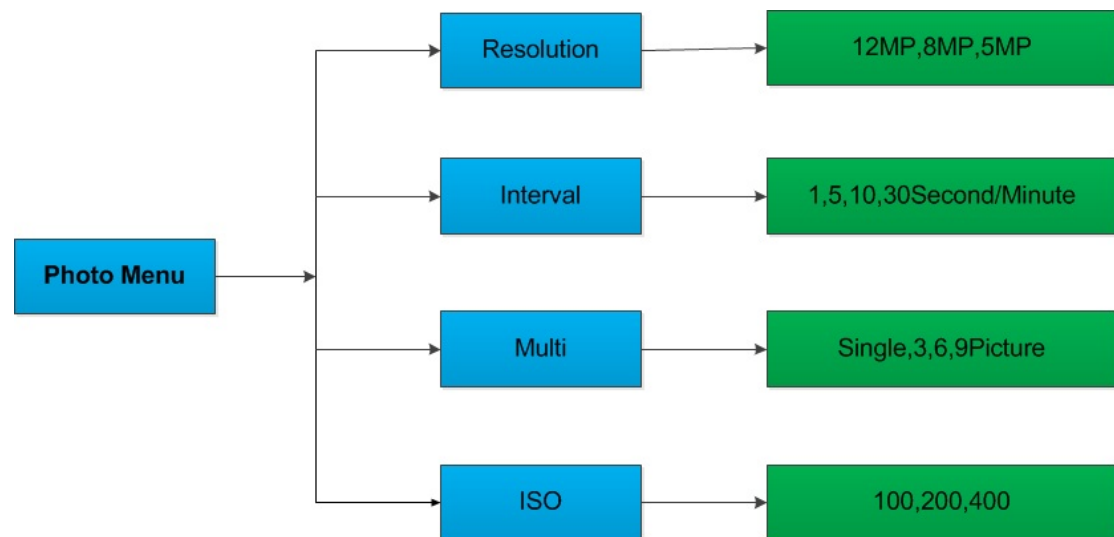
4.1 Settings Menu

To view the camera settings menu, press MENU in the TEST mode (called settings menu in this chapter). The settings menu will be shown on the LCD on camera or the external TV monitor.

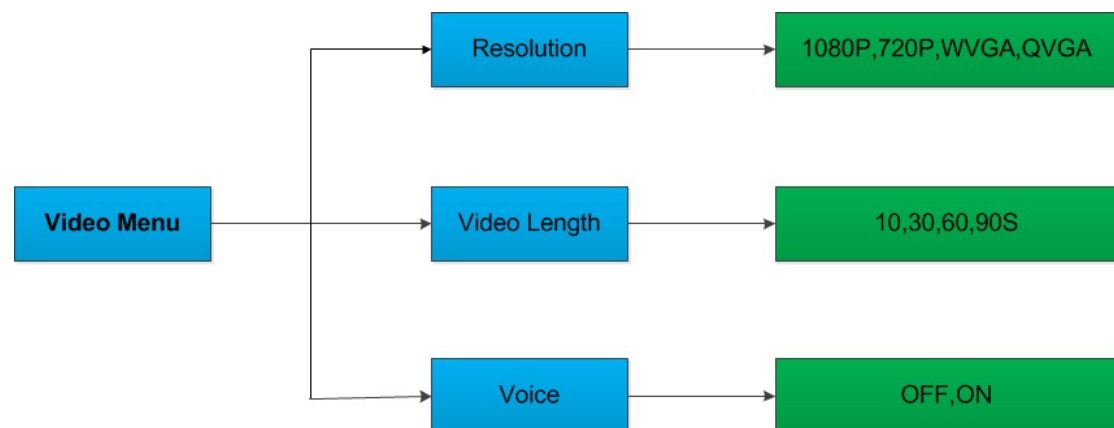
There are five parts setting of the camera:



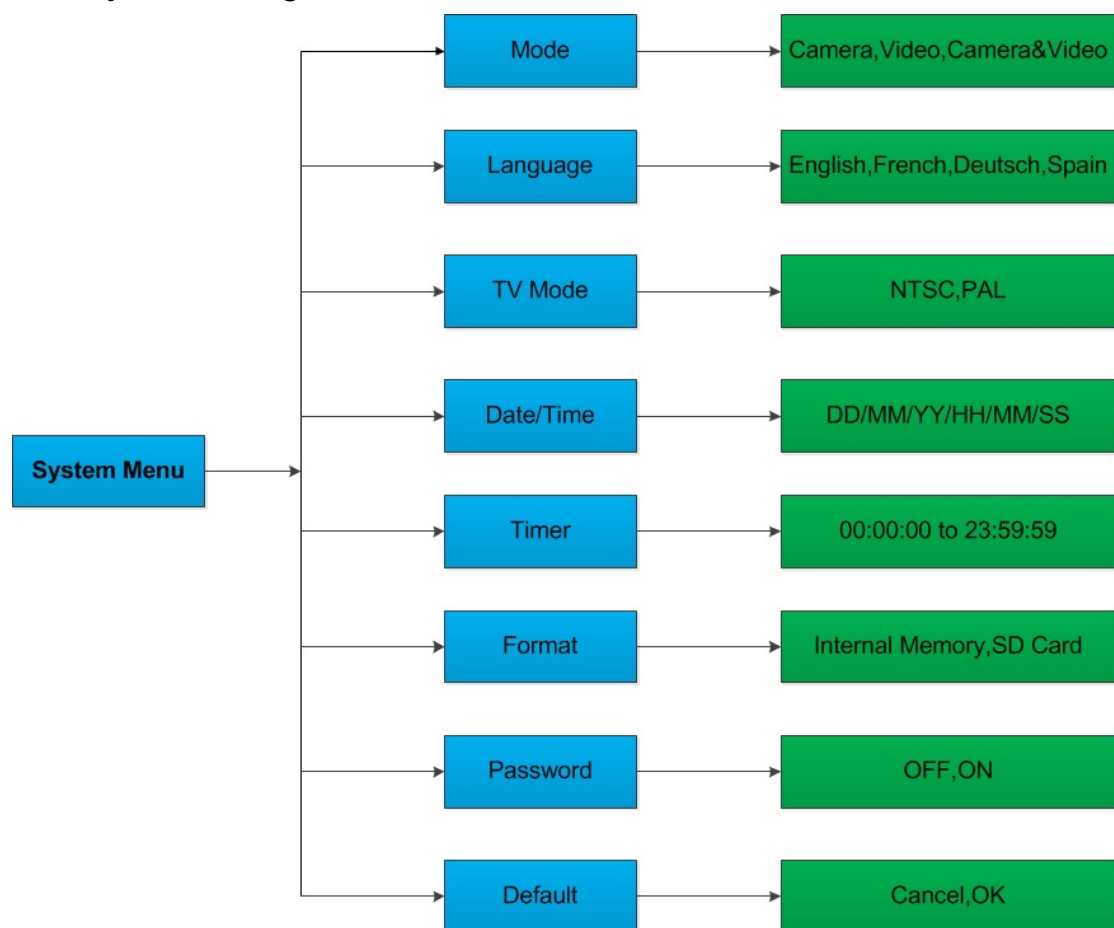
4.1.1 Photo Setting



4.1.2 Video Setting



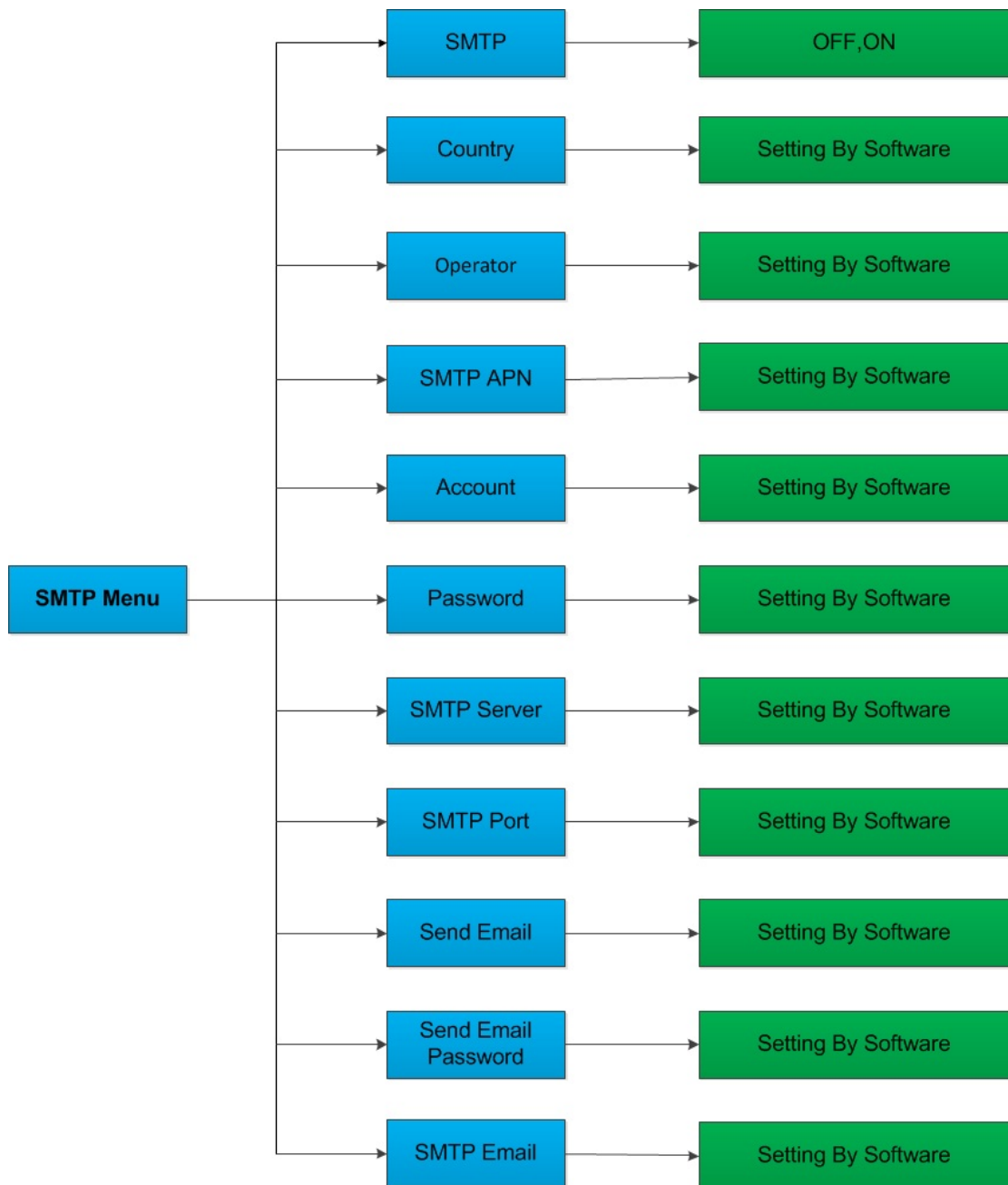
4.1.3 System Setting



4.1.4 MMS Menu

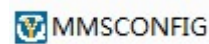
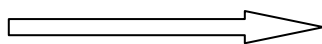
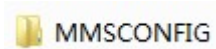


4.1.5 SMTP Menu



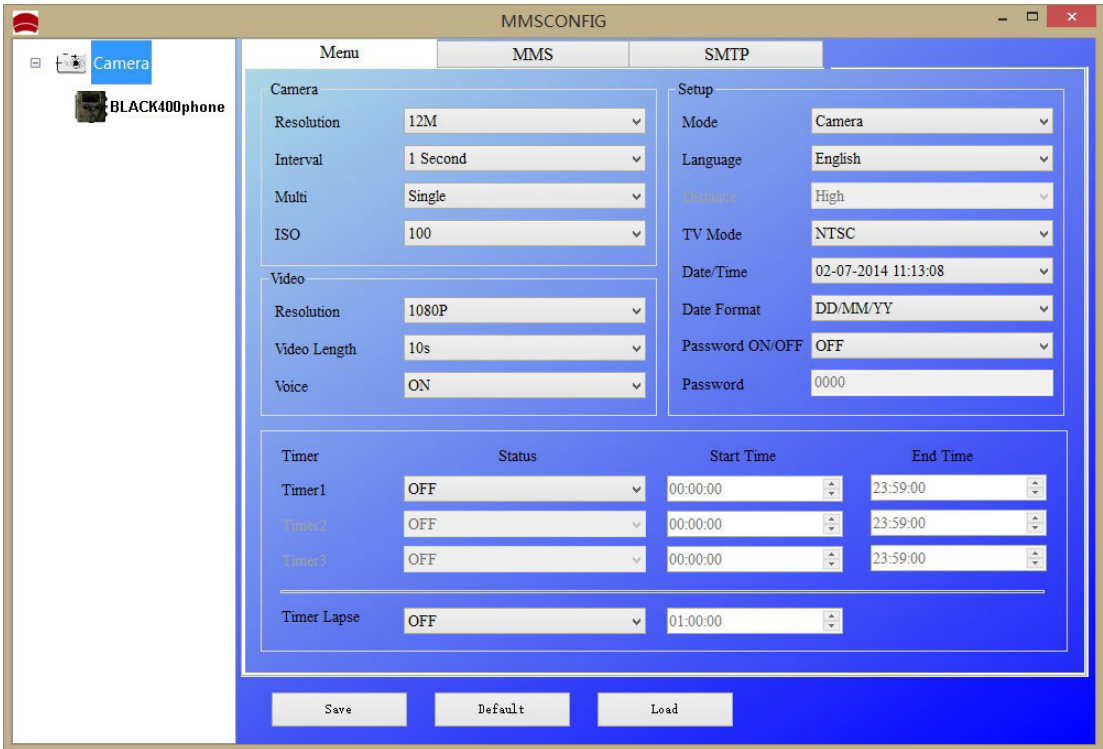
4.1.6 Fix the setting on the computer

You can fix Camera, MMS or SMTP setting on the computer. Run the MMSCONFIG.exe file from MMSCONFIG folder on the CD.



Note: Please move all the files in the root directory of MMSCONFIG folder to keep the setting available.

There are following windows:



1). Fix Camera Setting on PC

Click on Camera model BLACK400phone, the following interface is displayed:



Fix the camera setting based on your need.

Menu	Content	Description
Camera		
Resolution	12MP, 8MP, 5MP	Photo size

Interval	1/5/10/30 sec/min	Waiting time between images
Multi	1/3/6/9	Number of photos taken every time
ISO	100,200,400	The camera exposure level
Video		
Resolution	1080P, 720P, WVGA, QVGA	Video size
Video Length	10S, 30S, 60S, 90S	The length of video
Voice	On, Off	If On, Video sound is recorded
System		
Mode	Camera, video, camera&video	Taking picture, video, picture and video
Language	English, Francais, Deutsch and so on	Camera menu language
TV Mode	NTSC, PAL	TV play mode
Date/Time	02-07-2014 11:13:08	Date-Month-Year Hour:Minute:Second
Password ON/OFF	ON, OFF	Password of entering camera
Password	****	4 digits
Timer	On, Off	If On, the camera only works during this period
	Start Time	Start of camera working time
	End Time	End of camera working time

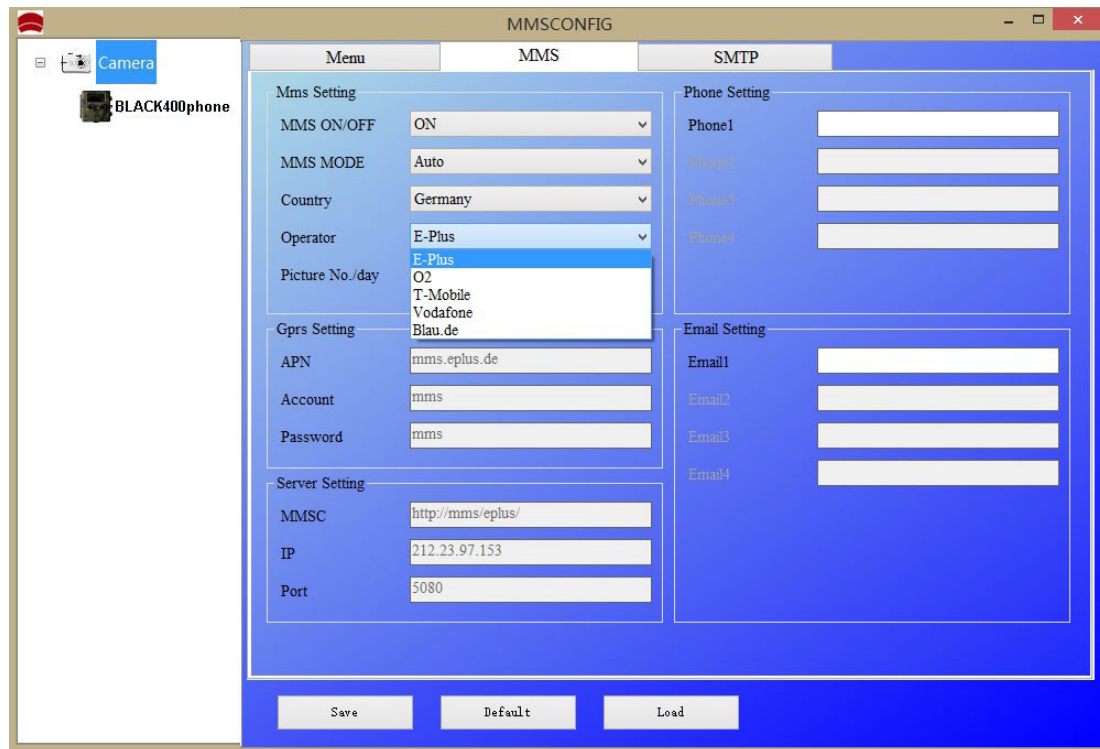
Click on Save to save your settings in the root directory of the SD card (you need to insert the SD card in your computer). A file named Parameter.dat will be created and saved in the directory you just selected. If you select a different directory on the computer, you need to move the Parameter.dat file to the root directory of the SD card before inserting the card in the camera.

Click on Default to use the default settings.

Remove the SD card from the computer and insert it in the camera. Switch to TEST position to check the settings.

2). Fix MMS Setting on PC

Click on MMS, the following interface is displayed:



Select how to set up MMS Mode: Auto or Manual.

1. **Auto** MMS MODE

Select Country and Operator.

Please pay attention to your costs per MMS!

Then add phone number or email address for receiving pictures.

2. **Manual** MMS MODE

Contact your mobile phone network operator for all the required information: APN, MMSC, IP and Port and enter.

Please pay attention to your costs per MMS!

For receiving pictures, please add phone number or email address.

Click on Save to save your settings in the root directory of the SD card (you need to insert the SD card in your computer). A file named Parameter.dat will be created and saved in the directory you just selected.

Please pay attention that "SMTP Function" must be in "OFF" mode.

3). Set up SMTP Function on PC

Click on SMTP, the following interface is displayed:

The screenshot shows a software window titled "Camera Parameter Setting -- HC-500M". On the left, there is a sidebar with a "Camera" icon and a "BLACK400phone" icon. The main area has three tabs: "Menu", "MMS", and "SMTP". The "SMTP" tab is selected. It contains several settings sections: "Smtp Setting" with fields for "SMTP ON/OFF" (set to ON), "SMTP MODE" (set to Auto), "Country" (set to Germany), "Operator" (set to O2), and "Picture No./day" (set to 99); "Gprs Setting" with fields for "APN" (set to internet), "Account", and "Password"; "Server Setting" with fields for "Type" (set to Gmail), "Server" (set to smtp.gmail.com), "Port" (set to 465), "Email" (set to testing@gmail.com), and "Password" (masked with asterisks); and "Email Setting" with four empty fields labeled "Email1", "Email2", "Email3", and "Email4". At the bottom of the window are three buttons: "Save", "Default", and "Load".

1. Auto MMS MODE

Select Country and Operator.

Select sending email provider, address and password.

Please pay attention to your costs per MMS!

Then add another email address for receiving the pictures.

2. Manual MMS MODE

Contact your mobile phone network operator for all the required information: APN, MMSC, IP and Port and enter.

Please pay attention to your costs per MMS!

Then add sending email address and password.

For receiving pictures, please add another email address.

Click on Save to save your settings in the root directory of the SD card (you need to insert the SD card in your computer). A file named Parameter.dat will be created and saved in the directory you just selected.

Remove the SD card from the computer and insert it in the camera. Switch to TEST position to check the settings.

Note: Because every network provider has its own settings for their MMS service, we recommend verifying all settings with your network provider, even if you select Auto to let the system to configure the settings. We pre-configure these settings for every major network provider on the CD. If you find that the settings have been changed, please notify us so that we can update the program.

Please pay attention that “MMS Function” must be in “OFF” mode.

Setting	Default	Items
Mode	Camera	Camera, Video, Camera&Video
Resolution (Camera)	12M	12M, 8M, 5M
Delay	1 Seconds	1-30 Seconds, 1-30 Minute
Multi	Single	Single, 3, 6, 9 Pictures
ISO	400	100, 200, 400
Resolution (Video)	1080P	1080P, 720P, WVGA, QVGA
Video Length	10s	10s, 30s, 60s, 90s
Date/Time	Same as last time	YY/MM/DD, MM/DD/YY, DD/MM/YY Adjust
Language	English	English, French, Germany, Spanish and Russian
Timer	0 0 0 to 23 59 59	Adjust
Format	Internal Memory	Internal Memory, SD Card
TV Mode	NTSC	NTSC, PAL
MMS Mode	On (99)	On, Off
SMTP Mode	On (99)	On, Off
Password	Off	Off, On

4.1.7 Default

4.1.8 General Settings

The operating steps are suitable for following menu items: Camera Mode, Photo Size, Video Size, Multi, Video Length, Interval, Timer etc.

4.1.9 Set Camera Mode

There are three camera modes: Camera, Video and Camera+Video. The way to set the camera mode is via setting menu.

The following shows how to set camera mode to Video, provided that the previous option is Camera:

- a) Press MENU to display the setting MENU.
- b) Press RIGHT to select SYSTEM.
- c) Press DOWN to select MODE.
- d) Press DOWN to select CAMERA.
- e) Press OK switch to save the current setting.
- f) Press MENU to cancel setting and return to info display.

4.1.10 Format SD-Card

The system will delete all images or videos stored in the SD-card after formatting,

make sure that you have made a backup of important data.

- a) Press MENU to display the setting MENU.
- b) Press RIGHT to select SYSTEM setting.
- c) Press DOWN to select FORMAT.
- d) Press RIGHT to select SD Card.
- e) Press down the select switch to choose Enter to enter into submenu.
- f) Press down to select OK. OK will be highlighted.
- g) Press OK to start formatting the SD-card. During formatting, the display screen will show a message "Please Wait".
- h) Press MENU to cancel setting and return to info display.

4.1.11 Set Photo Size

This parameter has three values: 12MP, 8MP and 5MP. The default value is 5 mega pixels. The following shows how to set pixel size as 12M Pixel:

- a) Press MENU to display the setting menu.
- b) Press DOWN to select Resolution
- c) Press Right to select 12M Pixel
- d) Press down the select switch to save the current setting, then press menu to return to info display.
- e) Press MENU to cancel setting and return to info display.

4.1.12 Set Video Size

This parameter also has four values: 1080P, 720P, WVGA and QVGA.

The default value is 1080P, the following shows how to set it to be WVGA video size:

- a) Press MENU to display the setting menu.
- b) Press DOWN to select Resolution.
- c) Press RIGHT to select WVGA
- d) Press down the select switch to save the current setting, then press menu to return to info display.
- e) Press MENU to cancel setting and return to info display.

4.1.13 Set Date and Time

You can change the date and time of the device by setting this parameter when necessary, e.g., after every battery change. The date format is day/month/year, the time format is hour: minute: second. The valid value for year is between 2010 and 2050.

Provided that the date and time are needed to be set to November 15th, 2011 and half past ten, the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press right enter into "system"
- c) Press DOWN to select Date/Time.
- d) Press Right to Display Date/Time Interface, Press UP and DOWN to change the Value.
- e) Press down the select switch to save all current setting, then press MENU to

return to info display.

- f) Press MENU to cancel setting and return to info display.

4.1.14 Set Multi

This parameter affects the number of pictures taken for each triggering in the camera mode. It has four values: "1 Photo", "3 Photos" "6 Photos" and "9 photos". Its default value is "1 Photo". The following shows how to set photo burst to 3 Photos, provided that the previous option is 1 Photo:

- a) Press MENU to display the setting menu.
- b) Press DOWN to select Multi.
- c) Press RIGHT to select 3 pictures.
- d) Press down the select switch to save the current setting, then press MENU to return to info display.
- e) Press MENU to cancel setting and return to info display.

4.1.15 Set ISO

This menu could only help you get a better photo at night, there are 3 values: 100,200,400.

- a) Press MENU to display the setting menu.
- b) Press DOWN to select ISO.
- c) Press down the select switch to save the current setting, then press MENU to return to info display.
- d) Press MENU to cancel setting and exit.

4.1.16 Set Video Length

The following shows how to set video length to 30 Seconds, provided that the previous value is 10 Seconds:

- a) Press MENU to display the setting menu.
- b) Press RIGHT to select Video.
- c) Press DOWN to select Video Length
- d) Press down the select switch to save the current setting, then press MENU to return to info display.
- e) Press MENU to cancel setting and exit.

4.1.17 Set Interval

This parameter means that how long the PIR (Passive Infrared motion sensor) will be disabled after each triggering in ON mode. During this time the PIR of the device will not react to the motion of human (or animals). The minimum interval is 5 seconds, it means the PIR works all the time and media is taken almost continuously. The maximum interval is 30 minutes, it means the PIR will be disabled for 30 minutes after each triggering. The default value is 5 seconds.

The following shows how to set PIR Triggering Interval Time as 1 minute provided that previous option is 5 seconds.

- a) Press MENU to display the setting menu.

- b) Press DOWN to select Interval.
- c) Press RIGHT to enter in to the interval setting.
- d) Press DOWN to select 1 minute.
- e) Press down the select switch to save the current setting, then press MENU to return to info display.
- f) Press MENU to cancel setting and return to info display.

4.1.18 Set Timer

This parameter defines a certain time lapse in a day when the Camera can be triggered. In the rest of the time the device is shut off. The effective value of the hour ranges from 0 to 23 while the minute ranges from 0 to 59.

Provided that the camera should work from eight a.m. to five p.m., the steps are as follows:

- a) Press MENU to display the setting menu.
- b) Press RIGHT to select System.
- c) Press DOWN to select Timer.
- d) Press RIGHT to select item, press UP or DOWN to change the value until the start time changes to 8 and the stop time changes to 17.
- e) Press down the select switch to save all current setting, then press MENU to return to info display.
- f) Press MENU to return to previous menu.

4.1.19 Set MMS Mode

The following shows how to set the MMS mode to Off, provided that the previous option is On:

- a) Press MENU to display the settings menu.
- b) Press RIGHT to select MMS.
- c) Press DOWN to select MMS.
- d) Press RIGHT to select Off.
- e) Press OK to save the current settings, then press MENU to return to info display.
- f) Press MENU to cancel settings and return to info display.

4.1.20 Enter Password

If the password setting is selected as On, after switching on the camera, the LCD screen on camera will prompt to enter password. The default password is off. It can be changed where the steps are as following:

- a) Press MENU to display the settings menu.
- b) Press RIGHT to select SYSTEM.
- c) Press DOWN to select PASSWORD.
- d) Press Up to select On, then press RIGHT to select 4 numbers as password.
- e) Press OK to save the current settings, then press MENU to return to info

- display.
- f) The LCD screen will prompt to enter the password next time you switch on the camera.
 - g) Press MENU to cancel setting and return to previous menu.

4.2 Playback

In playback mode, images or videos can be viewed, deleted. The images and videos can be viewed on: LCD screen on camera and TV monitor which connect to camera with TV cable. For simplicity, operations with PC won't be introduced here.

4.2.1 Viewing Photo or Video

- a) Switch to TEST mode and enter into info display.
- b) Press right the select switch to view the latest picture (or video) in LCD screen on camera, TV monitor or Image viewer with TV-in connector.
- c) Press Left to start playing the video when viewing
- d) Press Left again to stop playing the video.
- e) Press UP to view the previous picture (or video) and DOWN for the next.
- f) Press down the select switch to return to info display.

When viewing images, the total number of all images in the SD-card and the index of the displaying image will be shown respectively.

4.2.2 Delete Photo or Video

The operations are as following:

- a) Press Right to display Photos and Videos.
- b) Press Menu to select Delete.
- c) Press right to select delete current or delete all.
- d) Press OK, Cancel and OK are prompted.
- e) Press OK to delete the image or video.
- f) Press cancel to cancel, then press MENU and OK to return to info display.

Please note that after deleting a picture or a video file, the deleted files can't be restored! Furthermore, in order to delete all the images and video clips in the SD-card, it is suggested to format the SD-card.

4.3 File Numbering

Images and videos are separately saved in the pre-named folder (104MEDIA). File numbering continues by adding one to the last number for each new image or video. The saving name is like PTDC0001.JPB or PTDC0001.AVI. Through the suffix you can distinguish whether the file is an image (with suffix.jpg) or a video (with suffix.avi).

4.4 Firmware Upgrade

This camera is equipped with an automatic upgrade function for you. Upgrading is needed only when an improved firmware is available. The operations are as following:

1. Unzip the update file.
2. Copy the FW18NA.bin to SD card.
3. Insert the SD card into the camera.
4. Power on the camera (Test Mode).
5. The camera will read it and update itself automatically. When updating the camera, its screen is black.
6. The screen will light on after being finished
7. Plug out the SD card, then insert it into pc, delete the FW18NA.bin in the SD card.(If you don't do this, the camera will enter update mode when power on again).
8. Insert the SD card into the camera.

Appendix: Technical Specifications

Image sensor	5 Mega Pixel Color CMOS (12 MP interpolated)
Memory	SD Card (up to 32GB)
Lens	F=3.1; FOV=60
Size	160mm x 120mm x 50 mm
IR Filter	Full Automatic IR Filter
TFT Display	2.5" Color-TFT LCD
PIR sensor: Triggering sensitivity	High/Normal/Low
PIR sensor: angle of detection	60 °
IR LEDs	Black 54 LEDs/ invisible 940nm
PIR Sensing Distance	82ft/25 meters
Max Night Vision/Lighting Distance	64ft/20 meters
Trigger Time	0.7 seconds
Triggering Interval :	1/5/10/30 sec/min (default 1 sec)
Low Battery Indicator	Yes
Selectable Image Resolution:	12MP/8MP/5MP
Multiple Photo	1 - 9 pictures
Video Resolution	1080P/720P/VGA
File Format	JPEG/AVI
Date and Time Imprint	Yes
Exposure:	Auto
Password Security	4 digital PIN numbers
Frequency Bands	GSM 850/900/1800/1900 MHz
GSM/ GPRS	Data transfer by email
MMS to phone	1 - 4 phone numbers
MMS to e-mail	1 – 4 e-mail address
Periodic shot	1 sec ~24 h
Stand-by current	0.2 mA
Stand-by time	3 months
Working time	Approx. minimum 1 months (depend on use)
Interface	TV out (NTSC/PAL); USB; SD Card Holder; 9V DC External
Fix Method	Belt, on tripod, mount
Operation Temperature	-30 ~+70°C
Power Supply	Li ion battery (2600mAh), Charing time: 8 hours
Water proof	IP54

Included: Camera, 9V power supply, lithium battery, USB Cable, TV cable, CD Manual